

Split

Work Order ID 117010

April-24-14 9:04:42 AM

117010

Tuesday

May 20th Page 1

Item ID: D3602-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Angle *✓*

Stop

*NS2

Start Date: 4/23/14 Start Qty: 6.00

6

Cust Item ID:

Required Date: 4/23/14 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 14-04-28

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr Revision Nbr

D3602 Rev B

100

100

Waterjet

FLOW CNC Waterjet

304-040"

0.00

FLOW WATER JET

Memo

0.00

USE STAINLESS WITH PLASTIC WRAP

1-Cut as per Dwg D3602

Dwg Rev: B

Prog Rev: B

2-Deburr if necessary

110

110

QC

Quality Control

0.00

QC2- Inspect parts off machine FAI/FAIB

0.00

Memo

DAS
37
9-89

14-05-23

DAS
37
9-89

14-05-23

(6)

mm

DOA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____

Date: _____

Work Order update only

Work Order: _____
 Part No. _____
 NCR No. _____

DISPOSITION

Rework
Scrap
Use-as-is
Suspected Unapproved

AGAINST DEPARTMENT/PROCESS

Skid-tube
Machining
Thermoforming
Large Fab

Crosstube
Small Fab
Finishing
Composite

Water Jet
Prod. Eng. Coor.
Rec/Store/Packaging
Supplier

Engineering
Quality
Other

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	Bending	General	Folio/Program	Outside Dimensions	Pressure/Forced
	Centre Not Concentric		Grain	Over/Under tolerance	Set-up
	Cracks		Hardware	Part Incorrect	Temperature/Cure
	Crimp/Kink/Ripple/Wave		Inspection Incomplete/Unqualified	Part Lost/Missing	Weld
	Cuffs		Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled
	Crushing		Misaligned/off center	Positioned Wrong	
	Heat Treat		Mislabeled	Power Loss/Surge	Other
	Inspection Strip in Tube		Misread		
	Marks/Chatter		Off-set		
	Turning Sequence		Out of Calibration		
	Wave/Twist in Tube		Out of Sequence		

Work Order ID 117010

April-24-14 9:04:42 AM

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Page 2

Item ID: D3602-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Angle

Start Date: 4/23/14 Start Qty: 6.00

6

Cust Item ID:

Required Date: 4/23/14 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC8- Inspect parts - second check

0.00

DAS
27
9-89

6

120

OC

Quality Control

Memo

0.00 M/S/23

130

Small Fab

0.00

DAS
30
9-89

2

14/06/14

130

Small Fab

Memo

0.00

Small Fab

Form as per Dwg D3602

140

QC5- Inspect part completeness to step on W/O

0.00

DAS
27
9-89
M/6/24

2

140

OC

Quality Control

Memo

0.00

DQA: _____ Date: _____

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
				Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
				Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
NCR No. _____				Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Design											
Doc/Data											
Equip/Tooling											
Handling/Pre											
Material											
Operator											
Offset/Setup											
Process											
Supplier											
Training											
Transport											
Unapproved											
FAULT CATEGORY											
Landing Gear			General								
<input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function								
			<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence								
			<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge								
			<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled								
			<input type="checkbox"/> Other								

Work Order ID 117010

April-24-14 9:04:42 AM

117010

Page 3

Item ID: D3602-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Angle

Stop

NS2

Start Date: 4/23/14 Start Qty: 6.00

6

Cust Item ID:

Required Date: 4/23/14 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

Identify as per dwg & Stock Location: _____

0.00

2X 14-6-25 8P

150

Packaging

Packaging

Memo

0.00

PPP/20496

160

QC21- Final Inspection - Work Order Release

0.00

MLJ 14-06-26

160

QC

Quality Control

Memo

0.00

AB 14-06-25

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>		
NCR No. _____							

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube Marks/Chatter Turning Sequence Wave/Twist in Tube	General	Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish Fit/Function	Folio/Program Grain Hardware Inspection Incomplete/Unqualified Instructions Incomplete/Unclear Misaligned/off center Mislabeled Misread Off-set Out of Calibration Out of Sequence	Outside Dimensions Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Positioned Wrong Power Loss/Surge	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other

Picklist Print

Page 1

April-24-14 9:04:45 AM

Work Order ID: 117010

117010

Parent Item: D3602-1

D3602-1

Parent Item Name: Angle

Start Date: 4/23/14

Required Date: 4/23/14

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:A New Issue 07-02-27 JLM
IPP Rev:B 08-12-11 as per ECN08-577 DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S20GA4P		Purchased		No		100	sf	0.0000	0.585	3.694737	**	4.0	mm 14/05/23

M304S20GA4P

304/316 Sheet .040

* Not in
system

~~0.585~~

m129146

DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. _____			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
NCR No. _____			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
			Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Design										
Doc/Data										
Equip/Tooling										
Handling/Pre										
Material										
Operator										
Offset/Setup										
Process										
Supplier										
Training										
Transport										
Unapproved										
FAULT CATEGORY										
Landing Gear			General							
Bending	Bend	Folio/Program	Outside Dimensions	Pressure/Forced						
Centre Not Concentric	BOM/Route	Grain	Over/Under tolerance	Set-up						
Cracks	Broken/Damage/Defect	Hardware	Part Incorrect	Temperature/Cure						
Crimp/Kink/Ripple/Wave	Burrs	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld						
Cuffs	Contamination	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled						
Crushing	Countersink	Misaligned/off center	Positioned Wrong							
Heat Treat	Cut Too Short	Mislabeled	Power Loss/Surge	Other						
Inspection Strip in Tube	Drawing	Misread								
Marks/Chatter	Drill Holes	Off-set								
Turning Sequence	Finish	Out of Calibration								
Wave/Twist in Tube	Fit/Function	Out of Sequence								

DART AEROSPACE LTD	Work Order:	117010
Description: Angle	Part Number:	D3602-1
Inspection Dwg: D3602 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

DAS

DAS

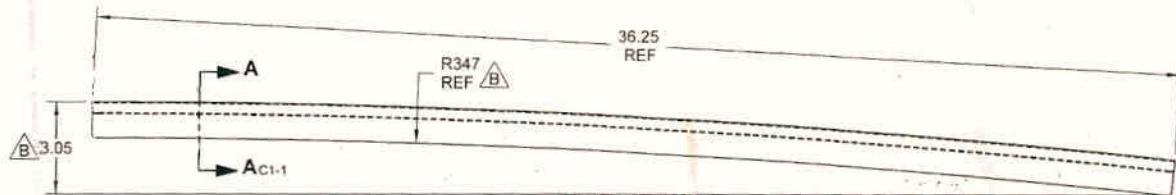
Measured by: <u>37</u> <u>9-89</u> /mm	Audited by: <u>27</u> <u>9-89</u> /	Prototype Approval: N/A
Date: <u>14/05/23</u>	Date: <u>14/5/23</u>	Date: N/A

Rev	Date	Change	Revised by	Approved
A	09.05.27	New Issue	KJ	[Signature]

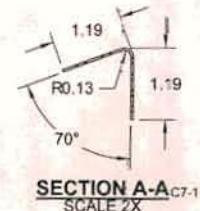
8 7 6 5 4 3 2 1

D

D



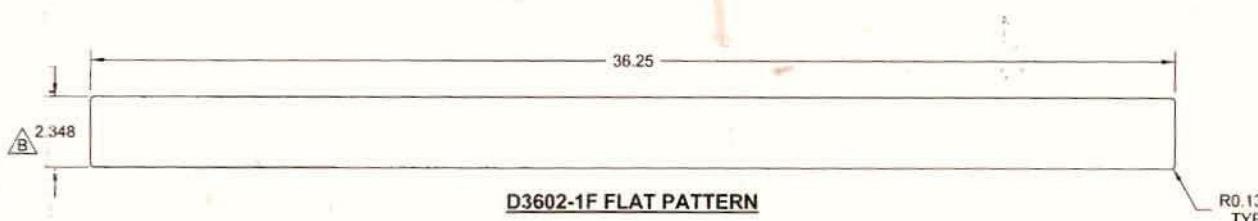
D3602-1 ANGLE
(MAKE FROM D3602-1F)



SECTION A-A_C-1
SCALE 2X

C

C



D3602-1F FLAT PATTERN

117010 MUS
(1404-78)

B

B

A

A

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, 20 GAUGE, 0.038 THICK, PER AMS 5513 OR AMS 5524, REF. DART SPEC. M304S20GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI C18 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFY WITH DART P/N "D3602-1" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.57 lbs

B	ADDED ROUNDED-SHAPE: R347 REF AND 3.05; 2.348 WAS 2.328. REF: NCR#09-014	MB	09.02.02
A	NEW ISSUE	MB	07.02.20
REV.	DESCRIPTION	BY	DATE
DES.GN			DART AEROSPACE LTD
DRAWN			HAWKESBURY, ONTARIO, CANADA
CHECKED			REV. B
MFG. APPR.			DRAWING NO.
APPROVED			D3602
DE APPR.			SHEET 1 OF 1
DATE	09.02.02		TITLE SCALE NTS
			ANGLE

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8 7 6 5 4 3 2 1